



# Why We Need NAPLAN

---

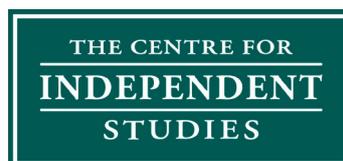
**Blaise Joseph**



A catalogue record for this book is available from the National Library of Australia

# **Why We Need NAPLAN**

Blaise Joseph



**Research Report 36**

## Related CIS publications

### Research Reports

RR31      Blaise Joseph, '*Getting the most out of Gonski 2.0*' (2017)

### Issue Analysis

IA103      Jennifer Buckingham, '*Making the Grade: School Report Cards and League Tables*' (2008)

# Contents

Executive Summary .....	1
Introduction.....	3
How does NAPLAN work? .....	3
The purpose and benefits of NAPLAN.....	4
Tool to improve schools and teaching.....	4
Transparency.....	4
Accountability.....	5
The common criticisms of NAPLAN .....	6
No significant improvement in results .....	6
Harms students .....	7
Publication of results on the MySchool website harms schools .....	9
Testing is too narrow .....	10
The future for NAPLAN .....	12
The alternative of a sample test would be inadequate .....	12
Moving online will be a significant improvement .....	12
What a possible review should consider .....	13
Conclusions .....	14
Endnotes.....	15

## **ACKNOWLEDGEMENTS**

Thanks to my colleagues Dr Jennifer Buckingham, Karla Pincott, and Simon Cowan for valuable assistance, and to three anonymous reviewers for their helpful comments on this report.

Any errors or omissions remain my own.



## Executive Summary

- The National Assessment Plan – Literacy and Numeracy (NAPLAN) is a crucial national assessment, but is coming under increasing criticism.
- There are three major benefits of NAPLAN:
  1. Tool to improve schools and teaching.
    - NAPLAN results enable the identification of problems in the school system over time, and are a means for evaluating potential solutions, from the national level all the way down to individual students.
  2. Transparency.
    - Literacy and numeracy results are made transparent at a national, state and territory, and school level. Parents are also able to see how their children are progressing against an objective national benchmark.
  3. Accountability.
    - NAPLAN holds governments and schools accountable for literacy and numeracy results, which is important given the significant financial investment made in them by taxpayers and parents.
- There are four common criticisms of NAPLAN, which are not supported by rigorous evidence:
  1. No significant improvement since NAPLAN was first introduced in 2008.
    - NAPLAN results have improved significantly in some areas since 2008, and the overall trend has been positive, with the exception of writing skills.
    - It is unreasonable to blame the NAPLAN tests for lack of further improvement, as NAPLAN identifies issues in the school system and does not solve them by itself.
    - Nevertheless, the fact that NAPLAN results have not improved more since 2008 warrants further investigation.
  2. Harms students.
    - The claim that NAPLAN tests harm students and causes significant student anxiety is based on surveys and small studies with serious methodological issues. A strong conclusion cannot be drawn based on the existing evidence to date.

- In general, it is not clear that testing by itself harms students. Low-level student anxiety in preparation for any test is normal, and this is very different from serious mental health issues.
3. Publication of results on MySchool website harms schools.
    - There have been no rigorous studies of how parents use MySchool data, and no substantial evidence to suggest MySchool has a negative effect on schools. Academic achievement is one of many factors parents use in choosing a school.
    - It is far better for parents to have access to objective NAPLAN data in their decision-making, rather than having to rely solely on other factors like school reputation, school uniforms, and school websites.
  4. The NAPLAN tests are too narrow.
    - Reading, writing, spelling, grammar, and numeracy are all necessary skills for students to succeed in later education and career paths.
    - It has not been established that broader capabilities like creativity can be taught or assessed effectively.
    - A focus on literacy and numeracy is appropriate given the large number of Australian children who do not have adequate skills in these areas.
- The suggested alternative to NAPLAN of having a sample test instead would be woefully inadequate. A sample test would not have the same major benefits of NAPLAN, could not be used as a tool to help individual students, and would not promote school transparency and accountability.
  - NAPLAN should be retained — because it has major benefits, and claims that it harms the school system have not been confirmed by reliable evidence — but it can be improved; and common concerns from teachers and parents should be taken into account and investigated further.
  - A possible future review of NAPLAN could consider:
    - how results can be better used as a tool to improve schools and teaching;
    - what is preventing schools and systems from responding more effectively to NAPLAN results;
    - how the purpose and benefits can be better communicated to stakeholders;
    - how the administration of the tests can be improved; and
    - whether or not the assessments are too narrow a measure of student ability.
  - Moving NAPLAN tests online will have significant benefits; including providing more timely results to schools to facilitate earlier intervention, and allowing for computer-adjusted testing tailored to individual student ability.
  - Australian taxpayers invest more than \$50 billion per year in the school system. NAPLAN is an important measure of the return on this investment, and provides valuable information for schools, teachers, parents, and students.

## Introduction

The National Assessment Plan — Literacy and Numeracy (NAPLAN) tests have been the subject of much controversy since they were first introduced by the Rudd Labor government in 2008. The implementation of NAPLAN — and the availability of school results on the MySchool website since 2010 — were among the major reforms of the then education minister Julia Gillard.

Literacy and numeracy testing had been done at a state and territory level since the 1990s, but following agreement between the federal and state and territory governments, NAPLAN was introduced so Australia had standardised national testing. NAPLAN is part of a broader trend across the OECD of school systems recognising the importance of assessment, evaluation, and accountability.<sup>1</sup>

NAPLAN is controversial because some stakeholders — such as teacher unions and education policymakers — are concerned about what they perceive to be an unreasonable level of accountability for schools and teachers, an excessive focus on testing, and potential for causing student stress.

10 years after the introduction of NAPLAN, it is timely to consider again the costs and benefits of NAPLAN. While NAPLAN retains popular support from parents, there are some stakeholders who continue to express concerns relating to unintended consequences and student wellbeing. These arguments need to be evaluated.

No test is perfect. But assessment is an integral part of education, and important for both school systems and individual students. The efficacy of national testing programs like NAPLAN should be a significant part of the education policy debate in Australia.

### How does NAPLAN work?

The yearly NAPLAN tests cover four domains — reading, writing, language conventions (spelling, grammar, and punctuation), and numeracy — for students in Years 3, 5, 7, and 9. School students sit NAPLAN test only four times in their entire schooling, and the tests take up one week of the school year, although most students take the tests over three partial days.

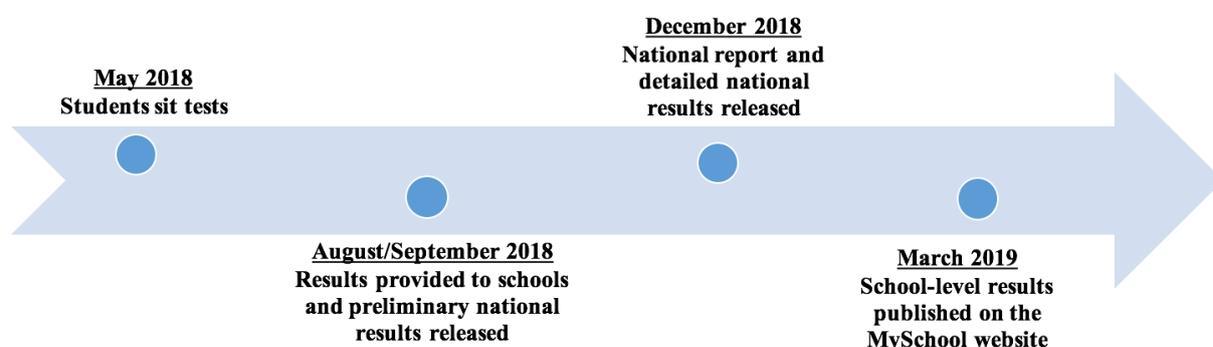
NAPLAN is administered by The Australian Curriculum, Assessment and Reporting Authority (ACARA). The school-level test results are published on the MySchool website, which allows for comparisons to the national average and to schools with similar students in terms of disadvantage, measured by the Index of Community Socio-Educational Advantage (ICSEA).

NAPLAN is compulsory for schools, but not for individual students. Parents who do not wish their children to sit the tests may opt out. More than 1 million school students sat NAPLAN tests in 2017. The percentage of children sitting NAPLAN in 2017 has fallen slightly since 2008: the participation rate for tests in 2008 ranged from 93% to 97%, and in 2017 the participation rate ranged from 91% to 96% (a decline of around 1% or 2% for most tests).<sup>2</sup> However, in the Northern Territory (for example), participation rates have significantly increased.

Almost all Australian school students continue to sit NAPLAN. For all intents and purposes, NAPLAN is a national population test of students, not a sample test.

NAPLAN is not a high-stakes test by the standard definition of the term,<sup>3</sup> insofar as there are no negative consequences for students who perform poorly on the tests, and teacher salaries and school funding are not determined by NAPLAN results.

**Figure 1: NAPLAN 2018 timeline<sup>4</sup>**





## The purpose and benefits of NAPLAN

In the financial year 2015-16, \$55.7 billion of taxpayer money was spent in recurrent funding for schools, of which \$42.4 billion was spent on the government school system.<sup>5</sup> State and federal governments have a responsibility to ensure this money is spent well. No one advocates testing just for the sake of it. The whole point of assessment is to benefit students, teachers, parents, and school systems.

### Tool to improve schools and teaching

Assessment is an essential part of schooling. It serves many functions, but among them is providing data that can enable student improvement. Assessments written and administered on the individual school or teacher level are beneficial, but are not comparable across schools and classes, and do not provide an objective benchmark against which student progress can be measured. Therefore, standardised assessments are necessary.

NAPLAN as a standardised assessment serves the function of a diagnostic tool for schools and systems; that is, it enables the identification of problems in the education system over time and a means for evaluating potential solutions.

NAPLAN results — being objective, standardised data — help improve literacy and numeracy on different levels, as illustrated in Figure 2.

By being administered every year for students in Years 3, 5, 7, and 9, NAPLAN is a measurement tool for assessing student progress over time. This allows the evaluation of the effectiveness of different parts of the school system, all the way from teachers' practices up to federal government policy interventions. For instance, NAPLAN data is regularly used to identify best practice case studies that have led to substantial student gains in literacy and numeracy, informing the practices of other schools.<sup>6</sup>

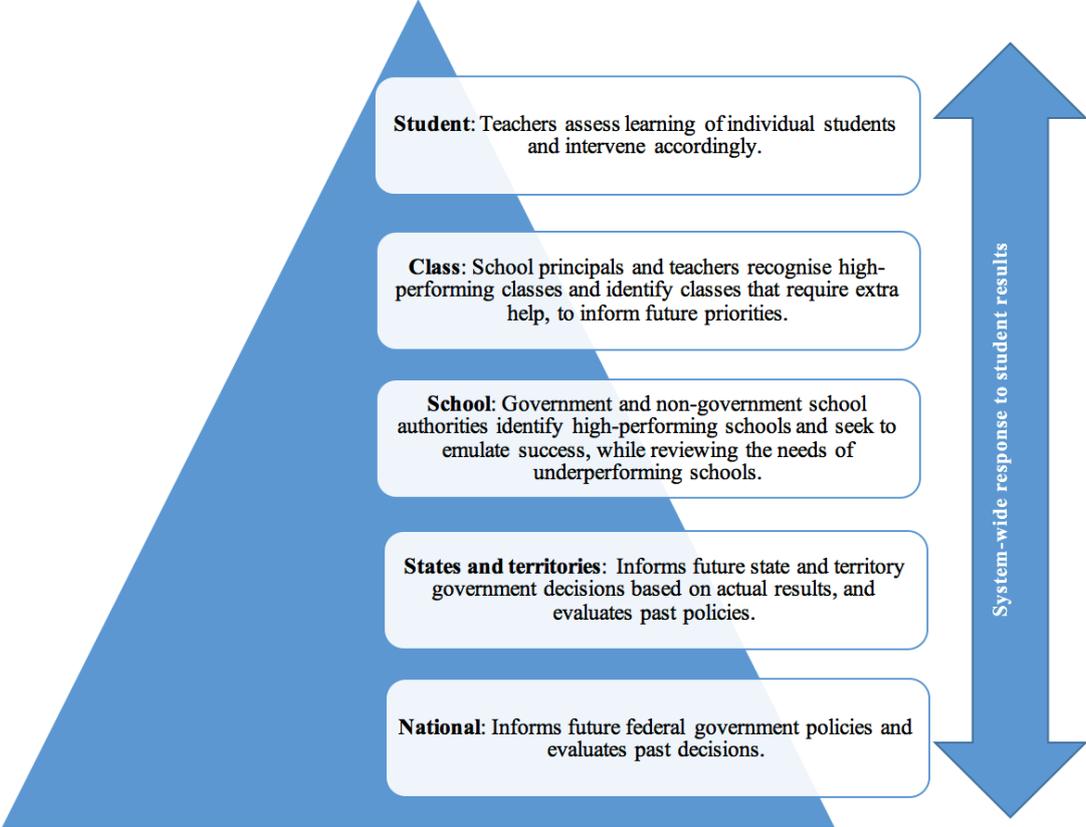
NAPLAN data can be used to identify students who are underperforming and in need of extra help at school, to ensure they do not fall behind in literacy and numeracy. It can be used in the same way on the class, school, state and territory, and national levels.

As argued by Australian parents' groups in a recent statement reiterating support for NAPLAN, the test results are an objective tool for parents to give a snapshot of their children's literacy and numeracy skills, and to cooperate with teachers in future to improve student performance.<sup>7</sup>

### Transparency

NAPLAN results are made transparent by being published on an aggregate national and state and territory level. This ensures there is transparency regarding literacy and numeracy results. If a particular state is significantly

**Figure 2: Levels of use of NAPLAN data**



underperforming, for example, this is made transparent so all Australians have the same knowledge.

The MySchool website shows results at the school level. This transparency empowers parents to make decisions regarding their child’s education, and ensures school-based assessments are presenting an accurate picture of a student’s performance consistent with national standards. If individual schools are underperforming, all parents have equal access to information showing this is the case.

An alternative approach of collecting the data but then withholding the information from the public would mean a small group of individuals in positions of influence (such as academics and education department officials) have access to the data, while the vast majority of parents are kept unaware. Most parents would have to rely on guesswork, gossip, and school reputation to assess the academic performance of schools. This would be unfair and go against the fundamental governing principle of transparency with respect to policy outcomes.

**Accountability**

All levels of government and the school system maintain that literacy and numeracy skills are vital.<sup>8</sup> NAPLAN

results ensure the entire school system — from the federal government all the way down to individual schools — is held accountable by parents and taxpayers for their literacy and numeracy outcomes, like any other area of public policy.

Given that the importance of schooling is universally recognised — and the yearly cost to the taxpayer of the school system is tens of billions of dollars — federal and state governments should be held particularly accountable for the results of their education policies. Similarly, it is important non-government schools are held accountable for their literacy and numeracy results, given the financial investment made by parents and taxpayers.

Without NAPLAN, there would be no standardised data by which to measure literacy and numeracy nationwide in a way that holds governments and schools to account for their results. As part of any sound governance arrangement, the responsible authorities should have to answer questions on how they have spent money and why their results have not improved if they have been spending more — which has occurred in the past 10 years in Australia, where real government spending per student has increased by over 15%.<sup>9</sup>



## The common criticisms of NAPLAN

Most students do not enjoy tests. In general, students prefer not sitting tests, teachers prefer not administering them, and marking is an arduous process. However, the fact that tests are unenjoyable is not a good reason to abandon an important tool of better governance. Inevitably, no test is perfect, and test results do not provide a complete picture of student progress. The genuine concerns of teachers, parents, and other stakeholders regarding NAPLAN must be taken into account. However, given the benefits of NAPLAN, any criticism — for example: that it is useless, harms students and schools, and is an unreasonably narrow assessment — should be thoroughly scrutinised.

### No significant improvement in results

A reason frequently given to argue NAPLAN has been a failure is that there has been no significant improvement in results since the tests were first introduced in 2008.<sup>10</sup>

But it is illogical to use NAPLAN results alone as a basis for determining if NAPLAN has succeeded or failed. Testing is primarily a measure of student performance and NAPLAN is not an exception to this rule. Whether or not a test leads to improved performance largely depends on how teachers respond to the test results. A test cannot be blamed for a lack of improvement — this would be analogous to blaming a thermometer for a hot day or criticising scales for a lack of weight loss.

The NAPLAN results are broadly consistent with Australia's trend in performance on international literacy and numeracy tests. Australia's results have stagnated or declined on the Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS) tests in the past 10 years,<sup>11</sup> which indicates NAPLAN is accurately identifying weaknesses in Australia's school system.

In any case, the premise of this argument against NAPLAN is not entirely correct. Table 1 shows the statistically significant changes in mean results, by state and territory, between 2008 and 2017 (the domain of writing is only comparable from 2011 onwards). The other published performance measure is the percentage of students at or above the national minimum standard. But this does not measure the change in results of the vast majority of students who are above the standard — and arguably is based on a low standard; so this is an inferior measure to the mean results. The MySchool website also publishes student gain data, which is arguably a better measure of school performance since it shows the extent to which schools have actually added to the achievement of students; but this is not available on an aggregate state or national level.

Since school policy — including literacy and numeracy strategies — is largely determined at the state and territory level, examining the performance of states and territories provides a more accurate representation of trends in NAPLAN results than considering the national average.

**Table 1: Statistically significant changes in mean NAPLAN results between 2008 and 2017<sup>12</sup>**

Domain	Students	NSW	VIC	QLD	WA	SA	TAS	NT	ACT	AUS
Reading	Year 3	↑	↑	↑	↑	↑	↑	↑	↑	↑
	Year 5	-	↑	↑	↑	↑	↑	-	↑	↑
	Year 7	-	-	-	-	-	-	-	-	-
	Year 9	-	-	-	-	-	-	-	-	-
Writing <sup>13</sup> (change between 2011 and 2017)	Year 3	-	-	-	-	-	-	-	-	-
	Year 5	↓	-	-	-	↓	-	-	↓	-
	Year 7	-	-	↓	↓	↓	-	-	-	↓
	Year 9	-	↓	↓	-	↓	-	-	-	-
Spelling	Year 3	-	-	↑	↑	-	-	↑	-	↑
	Year 5	-	-	↑	↑	-	-	↑	-	↑
	Year 7	-	-	↑	↑	-	-	-	-	-
	Year 9	-	-	-	↑	-	-	-	-	-
Grammar and Punctuation	Year 3	↑	↑	↑	↑	↑	↑	-	↑	↑
	Year 5	-	-	-	-	-	-	-	-	-
	Year 7	-	-	↑	↑	-	-	-	-	-
	Year 9	-	-	-	-	-	-	-	-	-
Numeracy	Year 3	-	-	↑	↑	-	-	-	-	-
	Year 5	-	-	↑	↑	↑	↑	-	↑	↑
	Year 7	-	-	-	↑	-	-	-	-	-
	Year 9	-	-	↑	↑	-	-	-	-	-

There have been some statistically significant national improvements in Years 3 and 5, especially in reading, but this has not been consistent across all states and territories. (Queensland and Western Australia, for instance, have seen far more consistent improvements.) For the majority of tests, and particularly Years 7 and 9, results have generally not changed — while writing results have declined.

Even if the measure of NAPLAN’s success was the overall trend in results, and there are good reasons to argue it is not, it is incorrect to argue NAPLAN has failed on this basis.

### Harms students

A frequent argument against NAPLAN is that it harms students and causes stress.<sup>14</sup> The evidence presented to support this claim is often anecdotal or self-reported. To date, there has not been a significant amount of rigorous research done on the topic.

But there have been some recent studies published on the effects of NAPLAN on students, particularly regarding the impact of the tests on student anxiety:

A 2016 study:<sup>15</sup>

- Sample size of 465 students, 346 parents, and 40 teachers, across 11 independent schools in Western Australia.
- Based on a survey of participants in each group, asking them to rate their experience of six adjectives — happy, worried, calm, sad, confident, and afraid — on a scale of 1 to 4, to measure distress.
- Found an average increase in levels of distress during NAPLAN for students and across all groups compared to after the testing, but this level of distress was low.

A 2012 study:<sup>16</sup>

- Sample size of 159 students in 1 regional public Queensland school.
- Based on a sequence of surveys before and after NAPLAN tests.
- Found that students' performance goals and self-efficacy reports remained stable after NAPLAN testing, although it appeared students experienced a greater level of anxiety than they had expected before the test.

A 2017 study:<sup>17</sup>

- Sample size of 105 students across 2 Catholic schools in Queensland.
- Based on an analysis of focus group discussions and student drawings about their test experiences.
- Found that a majority of students had contributed entirely negative responses.
- Has the smallest sample of the three studies, and relies upon apparently less rigorous data of student drawings and student descriptions of their own drawings.

All of these studies have small sample sizes and rely on student self-reporting. They provide conflicting evidence, but overall there can be no strong conclusion regarding NAPLAN causing significant student stress. If anything, it appears NAPLAN has little or no effect on student stress, and any negative effects are inconsistent.

There have also been some surveys of parents and teachers, regarding their perceptions of the effects of NAPLAN on students:

A 2013 Newspoll survey:<sup>18</sup>

- Sample of 568 parents.
- Found that 52% of parents perceived NAPLAN had no impact on their child's self-esteem, 23% perceived it had a positive impact, and 23% perceived it had a negative impact.
- 41% of parents reported their child exhibiting some signs of stress or anxiety as a direct result of NAPLAN testing, while 59% did not.
- This indicates that 3 in 4 parents think NAPLAN has either a positive impact or no impact on their child's self-esteem, and a clear majority report their child exhibits no sign of stress or anxiety as a result of NAPLAN.
- 56% of parents were in favour of NAPLAN, while 34% were against. It is obviously unlikely parents would support NAPLAN if they perceived it to have a negative effect on their child's well-being.
- The data is limited in usefulness insofar as self-esteem and the breakdown of the signs of stress and anxiety are unclear regarding severity, or how parents have determined a direct causal connection between these signs and NAPLAN.

A 2012 survey:<sup>19</sup>

- Sample of 8,353 teachers.
- Teachers were invited to participate in the survey through Australian teacher unions.
- The survey response rate was only 4%.
- Found a majority of teachers reported at least 1–10 of their students had said NAPLAN had caused stress, negative impacts on self-esteem, feeling sick before the test, fear of parental reaction to results, fear of freezing during the test, sleeplessness, and crying.
- The survey has serious methodological issues, with all participants being from teacher unions, a very low response rate, and probably teachers who had strong negative perceptions of NAPLAN were far more likely to respond to the survey.
- It is unclear from the framing of the questions (for each area of student well-being, teachers were asked to report if 1–10 or 11 or more students had said they exhibited the stated negative reactions to NAPLAN) exactly how widespread the occurrence of each student well-being issue is. For example, there is a significant difference between most teachers suggesting only 1 student they knew of had exhibited the signs of distress, or if teachers were actually suggesting 10 students had.

A 2014 qualitative study:<sup>20</sup>

- Sample of 16 principals, 29 teachers, 26 parents, and 70 students.
- Based on interviews with participants.
- Found widespread concerns in each group regarding NAPLAN's negative impact on student health and well-being.
- A relatively small sample and has the inherent limitations of qualitative studies with no consistent, comparable data.

These surveys provide conflicting evidence, but again no strong conclusion can be drawn about the extent to which NAPLAN causes student stress. There are inevitable limitations of asking parents and teachers if they have observed signs of student stress, as these perceptions can be misplaced and different individuals may have different ideas of what is meant by stress. There is nothing inherently more stressful about NAPLAN tests compared to the normal stress of taking a test. There are no consequences for low performance or rewards for high performance. If students are experiencing high levels of anxiety, it is arguable that this is the result of pressure or anxiety transmitted from the adults around them.

None of the studies or surveys discussed above actually examine if there a direct causal connection between NAPLAN and student stress — at most they indicate correlation.

Further, none of them investigate if the reported incidences of student anxiety are typical of those students, or if students exhibit similar behaviour during NAPLAN as they do for any test, including the usual teacher-written tests for each subject, or indeed for other schools activities such as camps or carnivals.

Finally, it is not clear from any of the findings if the perceptions of student stress are actually serious mental health issues, or are just low-level anxiety that typically come from a desire to perform well on any test. It is to be expected that most students would prefer not to

do tests, and many students would exhibit at least low levels of nervousness when being tested.

It can be concluded from the existing literature on the subject that there is no rigorous evidence suggesting NAPLAN itself has a negative impact on student health and well-being. More rigorous research is needed in this area to come to a strong conclusion either way.

In conclusion, the common claim that NAPLAN harms students is not supported by the existing evidence to date.

### **Box 1: Is frequency of testing related to student stress?**

Recent international evidence suggests more testing by itself does not increase student stress.

A 2017 OECD study, using data from the international PISA tests, considered the relationship between frequency of testing (as reported by school principals), student anxiety (as reported by students), and science test results.<sup>21</sup> It concluded, after controlling for socio-economic status, that:

*"Neither test anxiety nor science performance is related to the frequency of testing."<sup>22</sup>*

This finding was the same for both teacher-written tests and mandatory standardised tests (like NAPLAN or the HSC).<sup>23</sup> While the study considered science tests, there is no reason to suggest the result would be different for literacy and numeracy assessments. The study does rely on self-reporting regarding student anxiety; so it has similar limitations to the Australian evidence discussed above.

The OECD study also found 59% of students worry about taking tests and 66% worry about getting poor grades.<sup>24</sup> This indicates test anxiety is very common around the world, regardless of the type of test or national assessment policies.

Another finding was that students are less anxious about tests when they feel supported by teachers and parents.<sup>25</sup> Ultimately, ensuring appropriate levels of student support on the school level is the best way to manage inevitable student feelings of nervousness before tests, irrespective of the kind of testing being conducted. This issue is far broader than NAPLAN.

---

## **Publication of results on the MySchool website harms schools**

It has often been argued that publication of NAPLAN results on the MySchool website harms schools by making them focus excessively on doing well on NAPLAN tests.<sup>26</sup> It is claimed there are harmful effects of increased competition between schools, as parents will not enroll their children at schools with relatively poor results on the MySchool website, which means NAPLAN is a high-stakes test for schools.

The evidence for this argument is mostly anecdotal. There have been no rigorous large-sample studies examining how parents use the published NAPLAN results on the MySchool website, or the extent to which these determine school choice. There have been some surveys and studies considering how MySchool data is used, and the impact of the website on schools:

A 2013 Newspoll survey:<sup>27</sup>

- Sample of 568 parents (discussed in previous section).
- Found just 17% of parents said they had visited the MySchool website in the past 12 months in order to compare the NAPLAN results of their child's school with others.

A 2012 survey:<sup>28</sup>

- Sample of 1,062 school principals, based off on an earlier survey of all school principals with a response rate of 21%.
- Found 67% of principals said the MySchool website had a neutral effect on their school, 24% said it had a negative effect, and 8% said it had a positive effect.

A 2012 survey:<sup>29</sup>

- Sample of 8,353 teachers (with serious methodological issues discussed in previous section).
- Found 72% of teachers said the purpose of NAPLAN is to rank schools and 46% said it was to assist parent choice.
- Found 93% of teachers said poor results would negatively impact a school's ability to attract and retain students, and 65% said poor results would have a negative impact on a school's ability to attract or retain teachers.

- It is problematic to rely on teacher responses regarding how parents generally use NAPLAN data published on the MySchool website.

A 2012 study:<sup>30</sup>

- Small case study of just five families.
- Found the participating families did not use available data on the MySchool website in the process of choosing a school.
- Given the very small sample size, few conclusions can be inferred from this study.

A 2014 survey:<sup>31</sup>

- Conducted by Independent Schools Queensland; sample of 1,048 parents across 67 independent schools.
- Found just 5% of parents accessed the MySchool website when considering school selection.
- Strong academic performance was only the ninth most important factor for parents in choosing a school.
- The survey is not of a random sample and is not intended to be a scientific study, so limited conclusions can be drawn from it. But it does challenge the perception that parents are excessively concerned with the published school results on the MySchool website.

The small and limited amount of existing evidence does not enable a strong conclusion regarding how MySchool data is used by parents or the overall impact of the website on schools. It appears MySchool data is only one factor among many considered by parents in choosing schools. It is obvious parents will make a school choice based on all available information, and data on academic achievement would be one factor.

According to news reports, there has been a significant recent increase in the number of users on the MySchool website, rising from 839,000 in 2015 to 1.74 million in 2017, indicating it is a valuable resource for many people.<sup>32</sup>

It is preferable for parents to include academic achievement in their decision making. Using NAPLAN results to inform school choice — an objective measure of school performance — is better than the alternative of just relying upon school reputation, school websites, and school location. Parents being able to make choices based on the academic achievement of schools is a significant benefit of the MySchool website.

It is also likely that if future results were not published on the MySchool website, many parents would still use the last year of published NAPLAN results to determine school choice; which is an inferior measure to more up-to-date information. Given parents will make a choice of school regardless, it is better the choice is informed by all available information — including the latest NAPLAN results.

Even if school NAPLAN results were not published on the MySchool website, some stakeholders would still have access to this data. Groups such as politicians, academics and education department officials would be able to find out how individual schools are performing, while most parents would not; resulting in a clearly unfair and inequitable situation.

In any case, the debate about publishing the results of standardised tests is broader than NAPLAN. Data on academic achievement for secondary schools is publically available in some states, such as HSC results by school in NSW. In these cases, NAPLAN data on the MySchool website can be used as a supplement and ensure parents do not need to rely on only one set of data to assess school academic performance.

Finally, there is a significant amount of evidence to suggest parental involvement in school education is beneficial for student learning and well-being, as argued by a recent OECD report.<sup>33</sup> In Australia, there have been calls for parents to be more engaged in their children's education and involved in the school community. The published NAPLAN results on the MySchool website allows parents to have information relating to academic performance of their children and their school with respect to national benchmarks. This information facilitates parental involvement with their own child's progress over time.

It would appear contradictory to suggest parents should be involved in their children's learning and be active participants in the school community, while also arguing parents should not have any knowledge of how their children or their school are performing compared to national literacy and numeracy standards.

## Testing is too narrow

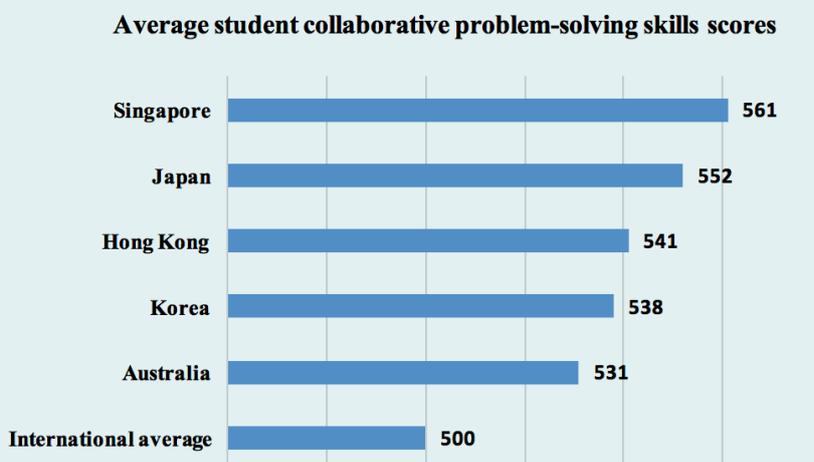
Reading, writing, spelling, grammar, and numeracy are all necessary skills for students to succeed in later education and career paths. But NAPLAN has been criticised for only assessing these areas and not broader skills.<sup>34</sup>

Broader capabilities which are commonly known the '4 Cs' of 21st century learning — critical thinking, communication, collaboration, and creativity — are not specifically assessed in NAPLAN. But claims about the importance of 21st century learning have not been substantiated by evidence. It has not been established that school systems can teach general capabilities effectively, and there are significant difficulties with trying to assess these skills objectively.<sup>35</sup> Students need to master the fundamentals of a subject before they can be creative or think critically about the content.<sup>36</sup> In other words, broader capabilities like creativity are domain-specific, not generic, skills.

## Box 2: Does focusing on literacy and numeracy stifle the development of other skills?

The OECD standardised tests (PISA) rank countries' education results, and while typically these tests focus on literacy and numeracy, more recently they have also tested collaborative problem-solving ability.<sup>37</sup>

52 countries participated in the collaborative problem-solving tests. The top four performing countries were Singapore, Japan, Hong Kong, and Korea:<sup>38</sup>



These top four countries tend to have traditional approaches to schooling, and were also among the top-performers in the literacy and numeracy tests,<sup>39</sup> which indicates that concerns about traditional schooling resulting in rote learning and stifling creativity are unfounded.

The country rankings were similar for both test types. Performance on collaborative problem-solving is highly correlated with science, reading, and maths performance.<sup>40</sup> Australia, which was ranked 10<sup>th</sup> in collaborative problem-solving, was one of the exceptions because its relative performance was significantly higher in collaborative problem-solving than for the other tests.<sup>41</sup>

There is little evidence to suggest that a focus on giving students high levels of literacy and numeracy is incompatible with developing students who are creative problem-solvers. Furthermore, it appears broader capabilities like collaborative problem-solving tend to correlate closely with literacy and numeracy skills anyway, and so do not require separate tests.

It should also be noted that NAPLAN writing tests require students in all year groups to write a response to a prompt in the narrative or persuasive genre, which involves critical thinking and creativity. Tasks like these show NAPLAN is not a narrow assessment of student ability.

There have been two surveys of teachers that found widespread concern about the narrowing of the curriculum due to NAPLAN:

- A survey of 767 teachers across South Australia and Western Australia found most teachers reported NAPLAN had caused them to teach to the test, spend less time on other areas of the curriculum, and use more teacher-centred instruction.<sup>42</sup>
- A survey of 8,314 teachers (based on the same survey discussed above with methodological issues) also found most teachers reported NAPLAN had led to a reduction in time spent on other areas of the curriculum and an adjustment of teaching practices to mirror the tests.<sup>43</sup>

Neither of these surveys is of a representative national sample of teachers; which means only limited conclusions can be drawn from their findings. More significantly, it is unclear if 'teaching to the test' is actually an undesirable practice if many students do not have adequate literacy and numeracy skills. Teachers focusing more on core literacy and numeracy skills is likely to be beneficial for disadvantaged students in particular. Further, the finding that NAPLAN leads to more teacher-centred instruction is not necessarily a cause for concern, given the large body of research across decades indicating teacher direct instruction is highly advantageous for student learning.<sup>44</sup>

It appears there is no rigorous evidence to support the claim that NAPLAN testing is too narrow.

## The future for NAPLAN

For the sake of students and taxpayers, NAPLAN must stay. It fulfills the vital role of providing transparency and accountability in the school system, while also being a tool that improves schools and teaching over time. The common criticisms of NAPLAN are not primarily evidence-based. Nevertheless, stakeholder concerns about NAPLAN must be heard and acted upon. NAPLAN can certainly be improved in future without losing its core functions.

### The alternative of a sample test would be inadequate

A sample test — instead of a population test which assesses all students — has been proposed by some groups as an alternative to NAPLAN.<sup>45</sup> But the main benefits of NAPLAN (a tool to improve schools and teaching, transparency, and accountability) would all be undermined if it was a sample test:

- *Tool to improve schools and teaching.*

A sample test would mean NAPLAN results could not be used as a tool to guide individual student or class or school teaching, because only a small proportion of students and schools would be assessed regularly, and the sample group would change each year.
- *Transparency.*

There would no longer be transparency regarding student outcomes at the school level. Parents would no longer have any consistent objective data upon which to base their assessment of local school performance, and instead would be forced to attempt to assess performance based on a number of subjective indicators like reputation and word of mouth.
- *Accountability.*

Schools and teachers would no longer be accountable for literacy and numeracy results throughout all of primary and secondary school. Schools could be significantly underperforming while parents would have no knowledge.

International tests that are based on samples, such as PISA and TIMSS, are only sample tests because of necessity and practicality. It is unnecessary for the OECD's purposes to assess all school students in participating countries. But in contrast, it has already been proven for 10 years that it is possible and practical to conduct a yearly national test for all Australian students.

In addition, a sample test would inevitably include some biases compared to a population test. It would be difficult to find a random national sample of students that accurately assesses national performance, or state and territory performance. Governments could dismiss the results of such a test on the grounds of methodology, unlike a population test.

It is clear the alternative of a sample test would be completely insufficient for the purposes of a national literacy and numeracy assessment.

### Moving online will be a significant improvement

NAPLAN testing is moving towards being entirely online, with the transition commencing from 2018. This has the potential to greatly improve both the efficiency and effectiveness of the tests. The major benefits include:

- *More timely results.*

Online tests facilitate a quicker turnaround time for student marks to be returned to schools, occurring in a matter of weeks instead of months.<sup>46</sup> This will enable the NAPLAN data to be used in a more timely fashion as a tool for teachers and schools to intervene to help individual students.
- *Tailored questioning for students' abilities.*

Students will be given questions of different difficulties depending on their responses to the first questions, allowing the tests to be tailored for ability levels.<sup>47</sup> This ensures students are asked questions appropriate for their own level, and the tests more accurately assess their literacy and numeracy skills. A recent study of 12,736 Australian students who sat pilot computer-adaptive NAPLAN tests found online testing also has other benefits, such as significant positive effects on achievement-measure precision, student motivation, and student engagement.<sup>48</sup>
- *Remove the need to have all students sitting a test at the same time.*

Currently students sit NAPLAN tests simultaneously to ensure fairness and reduce the possibility of cheating. However, with tailored questioning as described above, in future there should be no need for all students to be doing the test at exactly the same time, because the test would be adjusted depending on the individual student. Further, it means schools should be able to move to online testing even if they do not already have technological capacity for the entire year group to sit the test online at the same time.

There are some potential risks of moving NAPLAN online — such as schools not having the technology capacity, security concerns about hacking, and possible effects on students' handwriting abilities — which will need to be managed. But none of these potential challenges are insurmountable.

### What a possible review should consider

Education policies, like all other areas of government policy, should be the subject of ongoing review and improvement. NAPLAN should be no different. There

have been growing calls for a review, and the Education Council (made up of the federal, state, and territory education ministers) has agreed to draft terms of reference for a possible review.<sup>49</sup>

Given 2018 is the 10-year mark since the beginning of NAPLAN, it could be timely to conduct a review — although to date a substantive case has not been made for reviewing the fundamentals of NAPLAN, especially since there have already been two senate inquiries into NAPLAN.<sup>50</sup>

It is reasonable to review how NAPLAN data can be better utilised to improve future results, and to question why NAPLAN results have not improved more consistently over the past 10 years, in particular with respect to writing.

Concerns expressed by students, teachers, and parents in the small samples that have been surveyed should be examined. There may be better ways NAPLAN can be administered in future to ensure all stakeholders have a clear understanding of what NAPLAN involves and its purpose; so as to minimize any potential negative student reactions.

The content of NAPLAN tests should also be subject to ongoing review. The teacher surveys discussed above do warrant further investigation to determine if the NAPLAN questions should be broader or could be improved in other ways.

For instance, a recent review of the NAPLAN writing tests, undertaken by an overseas academic commissioned by a teachers' union, argued that the writing tests are seriously flawed.<sup>51</sup> Criticisms included the lack of informative writing in the assessment, the arbitrariness of the grading scales and marking rubrics, and that the tests encourage a narrow formulaic writing style. ACARA is already in the process of reviewing the writing tests, and has said these criticisms will be taken into account.<sup>52</sup> This is an example of how there appears to be valid criticisms of specific NAPLAN tasks, and also suggests ACARA periodically reviews potential issues with test questions.

NAPLAN must continue to be a population test to serve its core purpose. A sample test is obviously insufficient for the purposes of NAPLAN, so it would be unnecessary to consider this in a review.

Furthermore, it would be unwarranted for a review to consider not publishing school NAPLAN results on the MySchool website. The notion of collecting population school data and then keeping it secret from the public clearly goes against the sound governing principles of transparency and accountability.

However, this does not mean a review of NAPLAN should not be considered. There are aspects of the implementation and administration of NAPLAN testing that can potentially be improved. There are genuine concerns from some stakeholders, which must be listened to and acted upon.

A review could add value if it addressed the following five questions:

1. How can NAPLAN data be used more effectively as a tool to improve student outcomes on an individual, class, school, state, and national level? How can student gain data be combined with student achievement data to give a better measure of student performance over time?
2. What is preventing schools and systems from responding more effectively to low or static NAPLAN results to create improvement?
3. How can the purpose and benefits of NAPLAN be better communicated to stakeholders?
4. Can NAPLAN be administered better so as to minimize any stress or inconvenience for teachers, parents, and students?
5. Is NAPLAN testing currently too broad or too narrow? If so, how can NAPLAN questions be improved in future?

An independent review chaired by an expert panel with terms of reference like these could be beneficial for Australia's school system, and ensure NAPLAN continues to improve as an educational tool that also provides transparency and accountability. But a review with terms of reference questioning the existence of NAPLAN is not justified by the evidence to date.



## Conclusions

It is clear NAPLAN has significant positive utility. Results can be used as a tool to identify issues with student and school performance, and facilitate intervention to improve results over time. NAPLAN provides transparency and accountability for Australia's school system, from the federal government right down to individual schools. Abandoning NAPLAN or the MySchool website would amount to a retrograde move away from transparent and accountable government.

The common criticisms of NAPLAN are not supported by rigorous research. There is no strong case that NAPLAN harms students, harms schools, or results in an undesirably narrow curriculum. The evidence against NAPLAN to date are based on surveys and small studies with considerable limitations.

NAPLAN can still be improved. In particular, moving online will ensure the test results are timelier so they can be used more effectively as tool for improving teaching and learning, and also allow the test difficulty to be tailored to the individual needs of students, which appears to positively influence student motivation and engagement.

There is no strong case for reviewing the existence of NAPLAN. Although there could potentially be some benefits to reviewing aspects of NAPLAN, with terms of reference to answer the following five questions:

1. How can NAPLAN data be used more effectively as a tool to improve student outcomes on an individual, class, school, state, and national level? How can student gain data be combined with student achievement data to give a better measure of student performance over time?
2. What is preventing schools and systems from responding more effectively to low or static NAPLAN results to create improvement?
3. How can the purpose and benefits of NAPLAN be better communicated to stakeholders?
4. Can NAPLAN be administered better so as to minimize any stress or inconvenience for teachers, parents, and students?
5. Is NAPLAN testing currently too broad or too narrow? If so, how can NAPLAN questions be improved in future?

Australian taxpayers invest more than \$50 billion per year in schools. The NAPLAN tests fulfill the vital role of ensuring accountability for the return on this investment. NAPLAN must stay — and policymakers should focus on its continual improvement — for the sake of taxpayers, parents, teachers, and students.

## Endnotes

- 1 OECD. 2013. *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*. <http://www.oecd.org/education/school/synergies-for-better-learning.htm> pp. 17–19
- 2 Australian Curriculum, Assessment and Reporting Authority. 2018. *NAPLAN results: Participation rate*. <http://reports.acara.edu.au/Home/TimeSeries>
- 3 The Glossary of Education Reform. 2014. *High-Stakes Test*. <https://www.edglossary.org/high-stakes-testing/>
- 4 Australian Curriculum, Assessment and Reporting Authority. 2018. *NAPLAN Reports: Key Dates*. <https://acaraweb.blob.core.windows.net/acaraweb/docs/default-source/assessment-and-reporting-publications/20180328-naplan-reports-key-dates-2018.pdf?sfvrsn=2>
- 5 Australian Productivity Commission. 2018. *Report on Government Services 2018: School education*. <https://www.pc.gov.au/research/ongoing/report-on-government-services/2018/child-care-education-and-training/school-education> p. 4.3
- 6 Australian Curriculum, Assessment and Reporting Authority. 2018. *School perspectives: Principals of schools achieving substantially above average gain in NAPLAN 2017*. <http://www.acara.edu.au/reporting/my-school-website/case-studies-of-high-gain-schools>
- 7 Hill, S., Spratt, P., & Hick, W. 2018. *A joint statement from Australia's national parent associations on NAPLAN*. <http://www.medianet.com.au/releases/158669/>
- 8 For example, see declaration made by all Australian Education Ministers: Ministerial Council on Education, Employment, Training, and Youth Affairs. 2008. *Melbourne Declaration on Educational Goals for Young Australians*. [http://www.curriculum.edu.au/verve/\\_resources/National\\_Declaration\\_on\\_the\\_Educational\\_Goals\\_for\\_Young\\_Australians.pdf](http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf) pp. 5, 8, 13
- 9 Australian Productivity Commission. 2018. p. 5 of Table 4A.14
- 10 For example: Robinson, N. 2018. *Calls for NAPLAN review after report reveals no change in decade of results*. ABC News. <http://www.abc.net.au/news/2018-03-07/naplan-call-review-after-report-reveals-no-change-in-decade/9519840> ; Griffiths, M. 2017. *NAPLAN: Calls for review of student testing after small improvement recorded in 10 years*. ABC News. <http://www.abc.net.au/news/2017-08-02/calls-for-review-of-naplan-after-slim-improvement/8767400> ; Zadkovich, G. *Campaign to replace NAPLAN announced*. New South Wales Teachers Federation. <http://education.nswtf.org.au/education26/news-and-features-1/naplans-failure-prompts-push-replace-testing>
- 11 Thomson, S., De Bortoli, L., & Underwood, C. 2017a. *PISA 2015: Reporting Australia's Results*. Australian Council for Education Research. <https://research.acer.edu.au/cgi/viewcontent.cgi?article=1023&context=ozpisa> pp. xvii–xix; Thomson, S., Wernert, N., O'Grady, E., & Rodrigues, S. 2017b. *TIMSS 2015: Reporting Australia's Results*. Australian Council for Education Research. [https://research.acer.edu.au/cgi/viewcontent.cgi?article=1002&context=timss\\_2015](https://research.acer.edu.au/cgi/viewcontent.cgi?article=1002&context=timss_2015) pp. xvii–xx
- 12 Australian Curriculum, Assessment and Reporting Authority. 2018. *NAPLAN results: Time series*. <http://reports.acara.edu.au/Home/TimeSeries>
- 13 Narrative writing tests were replaced with persuasive writing tests in 2011, which means writing test results for the period 2008–2010 are not comparable to those for the period 2011–2017.
- 14 For example: Duggan, S. 2018. *Experts slam NAPLAN, call for federal review*. EducationHQ Australia. <https://au.educationhq.com/news/45994/experts-slam-naplan-call-for-federal-review/> ; Wilson, R. 2016. *Dump NAPLAN stress: here's a better way to do our national literacy and numeracy testing*. Australian Association for Research in Education blog. <http://www.aare.edu.au/blog/?p=1557> ; Thompson, G. 2012. *Anxious kids not learning: the real effects of NAPLAN*. The Conversation. <https://theconversation.com/anxious-kids-not-learning-the-real-effects-of-naplan-9526>
- 15 Rogers, S., Barblett, L., & Robinson, K. 2016. Investigating the impact of NAPLAN on student, parent and teacher emotional distress in independent schools. *The Australian Educational Researcher*. 43(3), pp. 327–343
- 16 Belcastro, L., & Boon, H. 2012. Student motivation for NAPLAN tests. *Australian and International Journal of Rural Education*. 22(2), pp. 1–19
- 17 Howell, A. 2017. 'Because then you could never ever get a job!': children's constructions of NAPLAN as high-stakes. *Journal of Education Policy*. 32(5), pp. 564–587
- 18 Whitlam Institute. 2013. *Parental Attitudes and Perceptions Concerning NAPLAN*. <https://www.whitlam.org/publications/2017/10/17/parental-attitudes-and-perceptions-concerning-naplan> pp. 7–11
- 19 Whitlam Institute. 2012. *An Educator's Perspective: The impacts of high stakes testing on school students and their families*. <https://www.whitlam.org/publications/2017/10/17/an-educators-perspective-the-impacts-of-high-stakes-testing-on-school-students-and-their-families> pp. 17–21
- 20 Wyn, J., Turnbull, M., & Grimshaw, L. 2014. *The Experience of Education: The impacts of high stakes testing on school students and their families*. Whitlam Institute. [https://www.westernsydney.edu.au/\\_\\_data/assets/pdf\\_file/0011/694199/The\\_experience\\_of\\_education\\_-\\_Qualitative\\_Study.pdf](https://www.westernsydney.edu.au/__data/assets/pdf_file/0011/694199/The_experience_of_education_-_Qualitative_Study.pdf) pp. 15, 19–20, 22–27
- 21 OECD. 2017a. *Is too much testing bad for student performance and well-being?*. [http://www.oecd-ilibrary.org/education/is-too-much-testing-bad-for-student-performance-and-well-being\\_2109a667-en](http://www.oecd-ilibrary.org/education/is-too-much-testing-bad-for-student-performance-and-well-being_2109a667-en)
- 22 OECD. 2017a. pp. 2, 4

- 23 OECD. 2017a. p. 2
- 24 OECD. 2017a. p. 2
- 25 OECD. 2017a. p. 2
- 26 For example: Smith, A. 2014. *My School should be scrapped, says Piccoli*. The Sydney Morning Herald. <https://www.smh.com.au/education/my-school-should-be-scrapped-says-piccoli-20140306-34adf.html> ; The Senate: Education and Employment References Committee. 2014. *Effectiveness of the National Assessment Program – Literacy and Numeracy: Final Report*. [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Education\\_and\\_Employment/Naplan13/Report/index](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_and_Employment/Naplan13/Report/index) pp. 21–25, 39–48; Hardy, I., & Boyle, C. 2011. My School? Critiquing the abstraction and quantification of education. *Asia-Pacific Journal of Teacher Education*. 39(3), pp. 211–222; Gorur, R. 2013. My school, my market. *Discourse: Studies in the Cultural Politics of Education*. 34(2), pp. 214–230; Redden, G., & Low, R. 2012. My school, education, and cultures of rating and ranking. *Review of Education, Pedagogy, and Cultural Studies*. 34(1-2), pp. 35–48
- 27 Whitlam Institute. 2013. p. 13
- 28 Coelli, M., Foster, G., & Leigh, A. 2018. Do school principals respond to increased public scrutiny? New survey evidence from Australia. *Economic Record*
- 29 Whitlam Institute. 2012. pp. 13–16
- 30 Rowe, E., & Windle, J. 2012. The Australian middle class and education: A small-scale study of the school choice experience as framed by 'My School' within inner city families. *Critical Studies in Education*. 53(2), pp. 137–151
- 31 Independent Schools Queensland. 2015. *What Parents Want: An Independent Schools Queensland Survey*. <https://www.isq.qld.edu.au/assets/03d1528c-99c1-4397-9e27-e6e361f60072/WhatparentswantkeyfindingsPrint2015.pdf> pp. 2, 5–6
- 32 Courier Mail. 2018. *Parents in support of NAPLAN*. Print edition, 4 April 2018
- 33 OECD. 2018. *Valuing our Teachers and Raising their Status*. <http://www.oecd.org/education/valuing-our-teachers-and-raising-their-status-9789264292697-en.htm> pp. 26–30
- 34 For example: Bourke, L. 2018. *Finnish education expert critical of NAPLAN ahead of his move to Australia*. The Sydney Morning Herald. <https://www.smh.com.au/politics/nsw/finnish-education-expert-critical-of-naplan-ahead-of-his-move-to-australia-20180112-h0hqz4.html> ; McGowan, M. 2018. *'Too much control': Pasi Sahlberg on what Finland can teach Australian schools*. The Guardian Australia. <https://www.theguardian.com/australia-news/2018/jan/07/pasi-sahlberg-finland-teach-australian-schools-education> ; Bye, C. 2016. *NAPLAN: Exams are a very narrow test, leading university educator says*. The Daily Telegraph. <https://www.dailytelegraph.com.au/news/nsw/naplan-exams-are-a-very-narrow-test-leading-university-educator-says/news-story/06f5e5c79870d53d4e35d6dbe2af3111>
- 35 Rotherham, A. & Willingham, D. 2010. *"21st-Century Skills: Not New, but a Worthy Challenge*. American Educator. <http://www.aft.org/sites/default/files/periodicals/RotherhamWillingham.pdf> ; Lai, E., & Viering, M. 2012. *Assessing 21st Century Skills: Integrating Research Findings*. Pearson, Paper Presented at The National Council on Measurement in Education, pp. 33–44
- 36 Willingham, T. 2016. *Knowledge and Practice: The Real Keys to Critical Thinking*. Knowledge Matters: Restoring Wonder and Excitement to the Classroom, Issue Brief #1, March 2016. <http://knowledgematterscampaign.org/wp-content/uploads/2016/05/Willingham-brief.pdf> ;
- 37 OECD. 2017b. *PISA 2015 Results (Volume V)*. <http://www.oecd.org/pisa/pisa-2015-results-volume-v-9789264285521-en.htm>
- 38 OECD. 2017b. p. 70
- 39 Thomson et al. 2017a., S., De Bortoli, L., & Underwood, C. 2017. pp. 35, 112, 167
- 40 OECD. 2017b. pp. 76–80
- 41 OECD. 2017b. p. 79
- 42 Thompson, G., & Harbaugh, A. 2013. A preliminary analysis of teacher perceptions of the effects of NAPLAN on pedagogy and curriculum. *The Australian Educational Researcher*. 40(3), pp. 299–314
- 43 Polesel, J., Rice, S., & Dulfer, N. 2014. The impact of high-stakes testing on curriculum and pedagogy: A teacher perspective from Australia. *Journal of Education Policy*. 29(5), pp. 640–657
- 44 Stockard, J., Wood, T., Coughlin, C., & Rasplia Khoury, C. 2018. The effectiveness of direct instruction curricula: a meta-analysis of a half century of research. *Review of Educational Research*
- 45 For example: Australian Government Primary Principals Association. 2018. *Media Release: AGPPA calls for a full and independent review of NAPLAN (9 March 2018)*. [http://www.agppa.asn.au/index.php?option=com\\_content&view=article&id=78:agppa-calls-for-a-full-and-independent-review-of-naplan&catid=10:media-releases&Itemid=21](http://www.agppa.asn.au/index.php?option=com_content&view=article&id=78:agppa-calls-for-a-full-and-independent-review-of-naplan&catid=10:media-releases&Itemid=21) ; Australian Education Union. 2010. *Australian Education Union Submission to the Senate Education Employment and Workplace Relations Committee into the Administration and Reporting of NAPLAN Testing*. p. 50
- 46 Australian Curriculum, Assessment and Reporting Authority. 2017. *NAPLAN Online*. <http://www.nap.edu.au/online-assessment>
- 47 Australian Curriculum, Assessment and Reporting Authority. 2017
- 48 Martin, A., & Lazendic, G. 2018. Computer-adaptive testing: Implications for students' achievement, motivation, engagement, and subjective test experience. *Journal of Educational Psychology*. 110(1), pp. 27–45

- 49 Cook, H. 2018. *'Detrimental': Victoria joins the push for a review of NAPLAN*. The Age. <https://www.theage.com.au/national/victoria/detrimental-victoria-joins-the-push-for-a-review-of-naplan-20180411-p4z8x4.html> ; Education Council. 2018. *Communiqué*. <http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/Communiques%20and%20Media%20Releases/2018%20Media%20Releases/Education%20Council%20Communique%2013%20April%202018.pdf> p. 2
- 50 The Senate: Education and Employment References Committee. 2014; The Senate: Education, Employment and Workplace Relations References Committee. 2010. *Administration and reporting of NAPLAN testing*. [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Education\\_Employment\\_and\\_Workplace\\_Relations/Completed\\_inquiries/2010-13/naplan/report/index](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_Employment_and_Workplace_Relations/Completed_inquiries/2010-13/naplan/report/index)
- 51 Perelman, L. 2018. *Towards a new NAPLAN: Teaching to the test*. [https://www.nswtf.org.au/files/18116\\_towards\\_a\\_new\\_digital.pdf](https://www.nswtf.org.au/files/18116_towards_a_new_digital.pdf)
- 52 Robinson, N. 2018. *NAPLAN's writing test is 'bizarre' but here's how kids can get top marks*. ABC News. <http://www.abc.net.au/news/2018-04-09/naplan-writing-test-bizarre-heres-how-kids-can-get-top-marks/9625852>

# About the Author



## Blaise Joseph

---

Blaise Joseph is an education policy analyst at The Centre for Independent Studies and a former teacher. He specialises in school funding policy in Australia and has authored several reports on the Gonski education reforms.

---

THE CENTRE FOR  
**INDEPENDENT**  
STUDIES

Research Report 36 (RR36) • ISSN: 2204-8979 (Printed) 2204-9215 (Online) • ISBN: 978-1-925744-02-6

Published May 2018 by The Centre for Independent Studies Limited. Views expressed are those of the authors and do not necessarily reflect the views of the Centre's staff, advisors, directors or officers.

© The Centre for Independent Studies (ABN 15 001 495 012), 2018

This publication is available from The Centre for Independent Studies. Visit [www.cis.org.au](http://www.cis.org.au).